§21.611

with all pertinent data, must be submitted through the civil aviation authority in that country to the FAA.

[Doc. No. 19589, 45 FR 38346, June 9, 1980, as amended by Amdt. 21–67, 54 FR 39291, Sept. 25, 1989]

§21.611 Design changes.

- (a) Minor changes by the manufacturer holding a TSO authorization. The manufacturer of an article under an authorization issued under this part may make minor design changes (any change other than a major change) without further approval by the Administrator. In this case, the changed article keeps the original model number (part numbers may be used to identify minor changes) and the manufacturer shall forward to the appropriate Aircraft Certification Office for the geographic area, any revised data that are necessary for compliance with §21.605(b).
- (b) Major changes by manufacturer holding a TSO authorization. Any design change by the manufacturer that is extensive enough to require a substantially complete investigation to determine compliance with a TSO is a major change. Before making such a change, the manufacturer shall assign a new type or model designation to the article and apply for an authorization under §21.605.
- (c) Changes by person other than manufacturer. No design change by any person (other than the manufacturer who submitted the statement of conformance for the article) is eligible for approval under this part unless the person seeking the approval is a manufacturer and applies under §21.605(a) for a separate TSO authorization. Persons other than a manufacturer may obtain approval for design changes under Part 43 or under the applicable airworthiness regulations.

[Doc. No. 19589, 45 FR 38346, June 9, 1980, as amended by Amdt. 21–67, 54 FR 39291, Sept. 25, 1989]

§21.613 Recordkeeping requirements.

(a) Keeping the records. Each manufacturer holding a TSO authorization under this part shall, for each article manufactured under that authorization, keep the following records at its factory:

- (1) A complete and current technical data file for each type or model article, including design drawings and specifications.
- (2) Complete and current inspection records showing that all inspections and tests required to ensure compliance with this part have been properly completed and documented.
- (b) Retention of records. The manufacturer shall retain the records described in paragraph (a)(1) of this section until it no longer manufactures the article. At that time, copies of these records shall be sent to the Administrator. The manufacturer shall retain the records described in paragraph (a)(2) of this section for a period of at least 2 years.

§21.615 FAA inspection.

Upon the request of the Administrator, each manufacturer of an article under a TSO authorization shall allow the Administrator to—

- (a) Inspect any article manufactured under that authorization;
- (b) Inspect the manufacturer's quality control system;
 - (c) Witness any tests;
- (d) Inspect the manufacturing facilities: and
- (e) Inspect the technical data files on that article.

§21.617 Issue of letters of TSO design approval: import appliances.

- (a) A letter of TSO design approval may be issued for an appliance that is manufactured in a foreign country with which the United States has an agreement for the acceptance of these appliances for export and import and that is to be imported into the United States if—
- (1) The country in which the appliance was manufactured certifies that the appliance has been examined, tested, and found to meet the applicable TSO designated in §21.305(b) or the applicable performance standards of the country in which the appliance was manufactured and any other performance standards the Administrator may prescribe to provide a level of safety equivalent to that provided by the TSO designated in §21.305(b); and
- (2) The manufacturer has submitted one copy of the technical data required

in the applicable performance standard through its civil aviation authority.

- (b) The letter of TSO design approval will be issued by the Administrator and must list any deviation granted to the manufacturer under §21.609.
- (c) After the Administrator has issued a letter of TSO design approval and the country of manufacture issues a Certificate of Airworthiness for Export as specified in §21.502(a), the manufacturer shall be authorized to identify the appliance with the TSO marking requirements described in §21.607(d) and in the applicable TSO. Each appliance must be accompanied by a Certificate of Airworthiness for Export as specified in §21.502(a) issued by the country of manufacture.

§21.619 Noncompliance.

The Administrator may, upon notice, withdraw the TSO authorization or letter of TSO design approval of any manufacturer who identifies with a TSO marking an article not meeting the performance standards of the applicable TSO.

§21.621 Transferability and duration.

A TSO authorization or letter of TSO design approval issued under this part is not transferable and is effective until surrendered, withdrawn, or otherwise terminated by the Administrator.

PART 23—AIRWORTHINESS STAND-ARDS: NORMAL, UTILITY, ACRO-BATIC, AND COMMUTER CAT-EGORY AIRPLANES

Special Federal Aviation Regulation No. 23

Subpart A—General

Sec.

- 23.1 Applicability.
- 23.2 Special retroactive requirements.
- 23.3 Airplane categories.

Subpart B-Flight

GENERAL

- 23.21 Proof of compliance.
- 23.23 Load distribution limits.
- 23.25 Weight limits.
- 23.29 Empty weight and corresponding center of gravity.
- 23.31 Removable ballast.

23.33 Propeller speed and pitch limits.

PERFORMANCE

- 23.45 General.
- 23.49 Stalling period. 23.51 Takeoff speeds.
- 23.53 Takeoff performance.
- 23.55 Accelerate-stop distance.
- 23.57 Takeoff path.
- 23.59 Takeoff distance and takeoff run.
- 23.61 Takeoff flight path.
- 23.63 Climb: General. 23.65 Climb: All engines opera
- 23.65 Climb: All engines operating.23.66 Takeoff climb: One-engine inoperative.
- 23.67 Climb: One engine inoperative.
- 23.69 Enroute climb/descent.
- 23.71 Glide: Single-engine airplanes.
- 23.73 Reference landing approach speed.
- 23.75 Landing distance.
- 23.77 Balked landing.

FLIGHT CHARACTERISTICS

23.141 General.

CONTROLLABILITY AND MANEUVERABILITY

- 23.143 General.
- 23.145 Longitudinal control.
- 23.147 Directional and lateral control.
- 23.149 Minimum control speed.
- 23.151 Acrobatic maneuvers.23.153 Control during landings.
- 23.155 Elevator control force in maneuvers.
- 23.157 Rate of roll.

TRIM

23.161 Trim.

STABILITY

- 23.171 General.
- 23.173 Static longitudinal stability.
- 23.175 Demonstration of static longitudinal stability.
- 23.177 Static directional and lateral stability.
- 23.181 Dynamic stability.

STALLS

- 23.201 Wings level stall.
- 23.203 Turning flight and accelerated turning stalls.
- 23.207 Stall warning.

SPINNING

23.221 Spinning.

GROUND AND WATER HANDLING CHARACTERISTICS

- CHARACTERISTICS
- 23.231 Longitudinal stability and control. 23.233 Directional stability and control.
- 23.235 Operation on unpaved surfaces.
- 23.237 Operation on water.
- 23.239 Spray characteristics.

MISCELLANEOUS FLIGHT REQUIREMENTS

23.251 Vibration and buffeting.